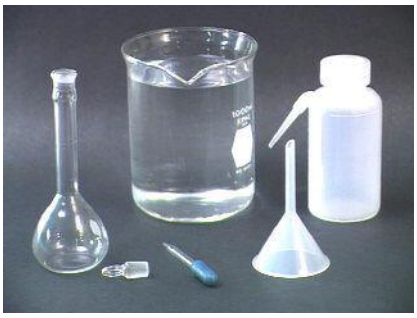

PREPARING SOLUTIONS

Making Solutions from a Solid

1. Measure the mass of solute required
2. Add the mass required to a beaker
3. Add ~80% of the required amount of water to the beaker to dissolve the solute
4. Pour the solution into a volumetric flask
5. Rinse the beaker with a small amount of water and pour into the volumetric flask
6. Slowly add the rest of the water to the volumetric flask (using a plastic water bottle) until the bottom of the meniscus rests on the line of the volumetric flask
7. Transfer the solution to a glass storage bottle

Making Solutions from a Liquid

*Use the formula $C_1V_1 = C_2V_2$

1. Measure the volume of solute required using a pipette
2. Add the volume of solute required to ~80% of the volume of water required in a beaker (measure the water with a graduated cylinder)
3. Pour the solution into a volumetric flask
4. Rinse the beaker with a small amount of water and pour into the volumetric flask
5. Slowly add the rest of the water to the volumetric flask (using a plastic water bottle) until the bottom of the meniscus rests on the line of the volumetric flask
6. Transfer the solution to a glass storage bottle

* When diluting acids **ALWAYS** add the acid to the water